

March 29, 2022

Ms. Theresa Gallagher
EPCRA Coordinator
United States Environmental Protection Agency
Region III
1650 Arch St.
Philadelphia, PA 19103-2029

Re: Response to Notice of Potential Violations & Opportunity to Confer

CERCLA Section 103, EPCRA Section 304

Dear Ms. Gallagher,

Bulk Chemicals, Inc. ("BCI") provides the following information in response to the United States Environmental Protection Agency's ("USEPA" or the "Agency") Notice of Potential Violations and Opportunity to Confer letter (the "Notice") received by BCI on March 8, 2022, regarding alleged June 2019 Emergency Planning and Community Right-to-Know Act ("EPCRA") Section 304 and Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") Section 103 violations. This response offers additional detail following our conference call on March 15, 2022, at which time BCI spoke with the Agency regarding the Notice and advised that it disagreed with the Agency's claim that BCI violated certain reporting obligations under EPCRA and CERCLA.

The Notice states as follows concerning the claimed violations:

According to information Bulk Chemicals provided during and after the inspection, an estimated 14,472 pounds of nitric acid were released from the Facility onto the road adjacent to the Facility. Nitric acid is a hazardous substance under CERCLA and an extremely hazardous substance under EPCRA with a RQ [reportable quantity] of 1,000 pounds. Bulk Chemicals indicated that it reported the release to the NRC [National Response Center] at 12:32 p.m. on June 10, 2019, more than a day late. Bulk Chemicals also indicated that it did not report the release to the Pennsylvania Emergency Management Agency at all. Bulk Chemicals submitted a written follow-up report to the SERC [State Emergency Response Commission] and the LEPC [Local Emergency Planning Committee], respectively, but the reports were submitted approximately sixty days after the release.

Quantity of Nitric Acid Released

The Notice does not accurately reflect when BCI became aware that a reportable quantity release of nitric acid occurred to the environment at the Mohrsville Road facility



(the "Facility"), an event significant for determining BCI's oral notification and written report submittal obligations under applicable law. A review of security video from the Facility indicates that the Shoemakersville Fire Chief discovered a certain amount of product exiting a building at the Facility at approximately 6:35 p.m. on June 9, 2019. The date and time are referenced in the lower right corner of the attached Exhibit A. As a point of clarification, while a small amount of nitric acid did drain onto the road, most of the material released from the building located at the central-west portion of the Facility flowed along the road. We believe "along" rather than "onto", is a more accurate description. See attached Exhibit B. Significantly, as described in more detail below, not all the spilled nitric acid exited the building.

During the evening of June 9, 2019, emergency responders were able stop the leak by pumping the nitric acid 67% from the leaking aboveground storage tank ("AST") to a stainless-steel mixing tank located in the same building and immediately next to the AST. The mixing tank does not have level identifiers to determine the amount of product in the tank. Electrified load cells and a scale are used to determine the amount, in pounds, of material in the tank during blending operations, but due to the corrosive environment inside the Facility, BCI was unable on June 9, 2019, to differentiate how much nitric acid was spilled inside the Facility and how much was released to the environment outside the Facility.

On June 10, 2019, at approximately 1:45 a.m., approximately seven hours after the Shoemakersville Fire Chief discovered the release, the exterior remediation company, Sioux Services, LLC, arrived to initiate a clean-up. See Exhibit C-1. The clean-up used an unknown quantity of solid absorbent material, generically referred to as "oil dry" to collect the released liquid. The mix of released material and absorbent was then placed into containers for waste disposal and was mostly completed by 6:45 a.m. See Exhibit C-2. Because an unknown quantity of absorbent material was used, BCI was not able to estimate the volume of nitric acid collected. During the morning hours of June 10, 2019, a fire occurred at the Facility further complicating efforts to stabilize the site and to fully gauge the volume of product lost. In an abundance of caution, and upon the Director of the Berks County Department of Emergency Services' recommendation, BCI immediately reported the release to the NRC at 12:32 p.m. on June 10, 2019.

Even assuming BCI had a reporting obligation at the time, which BCI disputes, notification to the NRC was made approximately 18 hours after the discovery of the leak by the Fire Chief, not "more than a day". Significantly, at the time of the notification, BCI was still unable to verify the quantity of product released to the exterior of the Facility due to its inability to gain unfettered access to the building at the Facility where the fire and leak occurred to even commence an investigation. Unsafe conditions that prevented access included damaged and unstable stacked chemical containers and a highly corrosive environment. In addition, fumed nitric acid residues created a slippery



surface throughout the Facility making access to the top of the bulk storage tank, by climbing 90-degree angle metal stairs, a significant safety hazard.

In an ongoing effort to clarify its reporting and regulatory obligations, two BCI employees, with the most chemical spill familiarity, reviewed security video where the land surface release occurred. Based on the video, both employees, who have prior experience responding to chemical spills and one with more than ten years' experience as a certified emergency response hazardous materials chemist, believe that less than 1,000 pounds ("lbs.") of nitric acid escaped containment and was released to the exterior of the building. The employees estimate the maximum amount released outside the building envelope to be less than ninety gallons ("gal.") of nitric acid 67% or 705 lbs. nitric acid 100%. Notarized affidavits from both employees are included with this submission.

The conversion from nitric acid 67% gal. to nitric acid 100% lbs. released is calculated below.

The conversion from gallons @ 67% to pounds @ 100% is calculated below:

1,000 lbs. nitric acid 100% = 1,492.5 lbs. nitric acid 67%:

 $1,000 \div 0.67 = 1,492.5$

1,492.5 lbs. nitric acid 67% = 127.83 gal. nitric acid 67%:

1,492.5 ÷ 11.676 (lbs./gal. nitric acid 67%) = 127.83 gal.

1,000 lbs. nitric acid 100% = 127.83 gal. nitric acid 67%

The maximum estimated release of 90 gal. nitric acid @ 67% or 705 lbs. @ 100% is calculated below:

90 gal. nitric acid 67% = 1,050.8 lbs. nitric acid 67%

 $90 \text{ gal} \times 11.676 = 1,050.8 \text{ lbs.}$

1,050.8 lbs. nitric acid 67% = 704.6 lbs. nitric acid 100%

 $1,050.8 \times .67\% = 704.6$

90 gal. nitric acid 67% = 704.6 lbs. nitric acid 100%

By late July 2019, the Facility was sufficiently stabilized to permit safe access to allow for the commencement of a thorough investigation and continuing remediation inside the building where the spill and fire occurred. Part of the investigation attempted to ascertain if any of the spilled material migrated under the concrete slab inside the Facility and came into direct contact with sub-surface soils. From July 25 - 30, 2019, Lewis Environmental ("Lewis") drilled twenty-four cores through the concrete slab in the Facility. Lewis used a coring machine with a 4-inch diameter concrete coring bit to drill



through the floor. Aquaterra Technologies, Inc. used a clean stainless-steel hand auger to collect forty-one samples, collected at approximately 0.5, 1.0 and 1.5 ft. below the top of the floor. Aquaterra submitted the samples to Pace Analytical for analysis. Eight soil samples had a pH detected at concentrations below five standard units. Additionally, one sample with a pH less than 5 was not submitted for analysis. Although the samples indicated a low pH, the total amount of nitric acid that seeped beneath the slab could still not be determined.

On August 29, 2019, Aquaterra directed Lewis to excavate the impacted soil beneath the concrete floor using a mini excavator. Additional excavation of this area continued through September 26, 2019. Based on BCI sub-slab observations during the period of excavation, a reliable estimate, that a reportable quantity in excess 1,000 pounds of nitric acid was released to the environment. BCI stands by its initial assessment that less than 1,000 pounds was released outside of the building into the environment based upon security video footage. The remainder stayed inside the building, some contained and some migrating beneath concrete floor slabs.

Both the initial notification to the NRC, and the subsequent written follow-up report to the SERC and LEPC, were submitted prior to the start of the excavation on August 29, 2019. It was not until the excavation when BCI, based on observations, finally obtained knowledge that a reportable quantity release occurred at the Facility, most of which did not exit the building at the Facility where the spill originated. Although the amount of nitric acid released did exceed the reportable quantity, at the time BCI reported the release to NRC and submitted written reports to the SERC and LEPC, it not only was unable to confirm the volume of product released, but reasonably believed that the quantity released did not exceed the reportable quantity. BCI, nevertheless, in an abundance of caution, notified the NRC of the release and submitted its written reports.

Failure to Report Release to the Pennsylvania Emergency Management Agency (SERC)

BCI takes issue with the contention that it failed to notify state officials of the release. While EPCRA Section 304 requires the owner, here BCI, to immediately notify the SERC of a release, here the LEPC on BCI's behalf, notified the SERC of the release and Pennsylvania Department of Environmental Protection ("PaDEP") was on-site by 8:05 p.m. Applicable law does not prevent notification being made on the owner's behalf. Here, notification was provided to the SERC by the LEPC. Upon arrival, BCI personnel were informed by the LEPC that notification had been provided to the SERC. PaDEP having arrived at the Facility within two hours of the notification suggests that the LEPC's notification served its purpose of facilitating an almost immediate on-site response by PaDEP. Given the circumstances in which notification was transmitted, BCI submits that the spirit of Section 304 was complied with in this instance and that BCI



should not be assessed a penalty for someone reporting the release to SERC on its behalf.

Mitigation

The imposition of penalties against BCI for alleged violations of CERCLA and EPCRA is inappropriate given BCI's compliance history, good faith efforts to comply, cooperation and the economic benefit of any non-compliance. Here, as the Agency is well aware, BCI, which has never been the recipient of a notice of violation by PaDEP or USEPA and takes pride in its track record of regulatory compliance, immediately assumed a very active role responding to the release, conducting an investigation, remediating the leak, implementing new operational protocols and undertaking significant construction to minimize the risk of a similar leak in the future. Such efforts were undertaken in close and frequent communication with USEPA, which at all steps of the way, provided invaluable support and guidance due to BCI's unique market niche which created numerous challenges to develop new, untried protocols necessary to minimize the risk of future releases. BCI has to date expended just under \$2,500,000 in costs for consultants, process changes and construction expenditures as part of this effort, approximately \$1,000,000 for the installation of fire suppression and related detection and alarm systems as its various facilities, and the owners of BCI have invested \$2,000,000 in a new more state of the art facility that will further minimize the risk of future releases similar to the one in this instance. For all these reasons, BCI respectfully requests that the Agency take these mitigation factors into account in assessing any penalty it believes is required under the CERCLA and EPCRA penalty matrix.

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this response to the Opportunity to Confer and that, based on my inquiry of those individuals immediately responsible for obtaining or compiling the information, I believe that the submitted information is true, accurate and complete. I recognize that there are significant penalties for submitting false and/or misleading information including the possibility of a fine and/or imprisonment.

Signature: <

Printed Name: Harry F. Adams

Title: President

cc: Cynthia T. Weiss, Esq. (3RC20, weiss.cynthia@epa.gov)
David R. Beane, Esq., Beane LLC, drb@beanllc.com

AFFIDAVIT OF MICHAEL ROWLEY IN SUPPORT OF RESPONSE OF BULK CHEMICALS, INC. TO NOTICE OF POTENTIAL VIOLATIONS LETTER OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY DATED MARCH 8, 2022

COMMONWEALTH OF PENNSYLVANIA)	
)	Sworn Statement
COUNTY OF BERKS)	

- I, David Heffelfinger, being duly sworn, depose and say:
- 1. I am the Production Supervisor for Bulk Chemicals, Inc. (BCI).
- 2. I have served as BCI's Production Supervisor since April 11, 2011, and have more than ten years' experience responding to chemical spills.
- 3. On June 9, 2019, I was physically present at BCI's 809 Mohrsville Rd. Shoemakersville, PA 19555 facility after having been notified that there was a release of nitric acid at the facility.
- 4. Because my efforts on June 9, 2019, were focused entirely on stabilizing conditions at the facility and because of my inability to access the building from which the release occurred, I was unable at the time to determine the amount of nitric acid released.
- 5. I have since reviewed video taken from several security cameras at the facility on June 9, 2019, depicting the exterior of the building where the release originated, specifically video showing the volume of material that exited the building and flowed toward and along the road.
- The video footage captures the beginning and end of product flowing from the building.
- 7. Not all of the nitric acid released at the facility on June 9, 2019, exited the building.
- 8. Based on my prior experiences responding to chemical spills and more than ten years' experience as a certified emergency response hazardous materials chemist, I estimate having viewed the video footage that the material released was less than 90 gallons (705 pounds).

The content of this *Affidavit* is true and correct to the best of my knowledge, information and belief.

Davide Heffelfinger

Susan a. Zulinski

Sworn to and subscribed before me, the undersigned authority, on this 29 day of March,

2022.

Notary Public

Commonwealth of Pennsylvania - N. tary Seal Susan A. Zielinski, Notary Public Berks County

My Commission Expires February 6, 2024 Commission Number 1185311

AFFIDAVIT OF MICHAEL ROWLEY IN SUPPORT OF RESPONSE OF BULK CHEMICALS, INC. TO NOTICE OF POTENTIAL VIOLATIONS LETTER OF UNITED STATES ENVIRONMENTAL PROTECTION AGENCY DATED MARCH 8, 2022

COMMONWEALTH OF PENNSYLVANIA)	
)	Sworn Statement
COUNTY OF BERKS)	

- I, Michael Rowley, being duly sworn, depose and say:
- 1. I am the Environmental Health and Safety (EHS)Coordinator for Bulk Chemicals, Inc. (BCI).
- 2. I have served as BCI's EHS Coordinator since May 13, 2019, and have more than ten years' experience as a certified emergency response hazardous materials chemist including responding to chemical spills.
- 3. On June 9, 2019, I was physically present at BCI's 809 Mohrsville Rd. Shoemakersville, PA 19555 facility after having been notified that there was a release of nitric acid at the facility.
- 4. Because my efforts on June 9, 2019, were focused entirely on stabilizing conditions at the facility and because of my inability to access the building from which the release occurred, I was unable at the time to determine the amount of nitric acid released.
- 5. I have since reviewed video taken from several security cameras at the facility on June 9, 2019, depicting the exterior of the building where the release originated, specifically video showing the volume of material that exited the building and flowed toward and along the road.
- 6. The video footage captures the beginning and end of product flowing from the building.
- 7. Not all of the nitric acid released at the facility on June 9, 2019, exited the building.
- 8. Based on my prior experiences responding to chemical spills and more than ten years' experience as a certified emergency response hazardous materials chemist, I estimate having viewed the video footage that the material released was in the range of 75-80 gallons (590-630 pounds).

The content of this *Affidavit* is true and correct to the best of my knowledge, information and belief.

Michael Rowley

Sworn to and subscribed before me, the undersigned authority, on this $\frac{29^{+4}}{29}$ day of March,

2022.

Notary Public

Commonwealth of Pennsylvania - Notary Seal Susan A. Zielinski, Notary Public Berks County

My Commission Expires February 6, 2024 Commission Number 1185311

Exhibit A

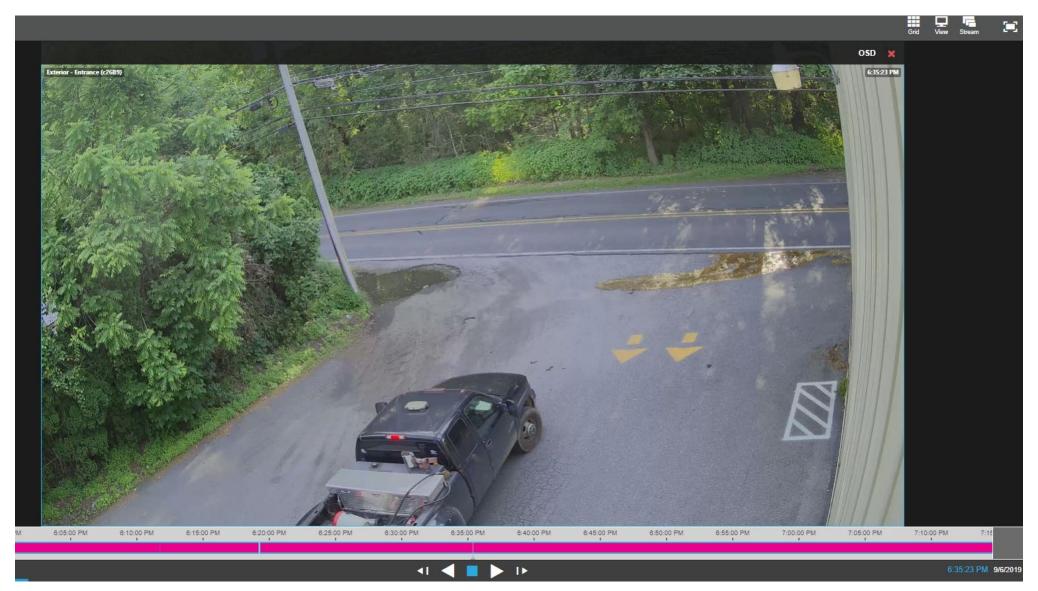


Exhibit B





Exhibit C-1

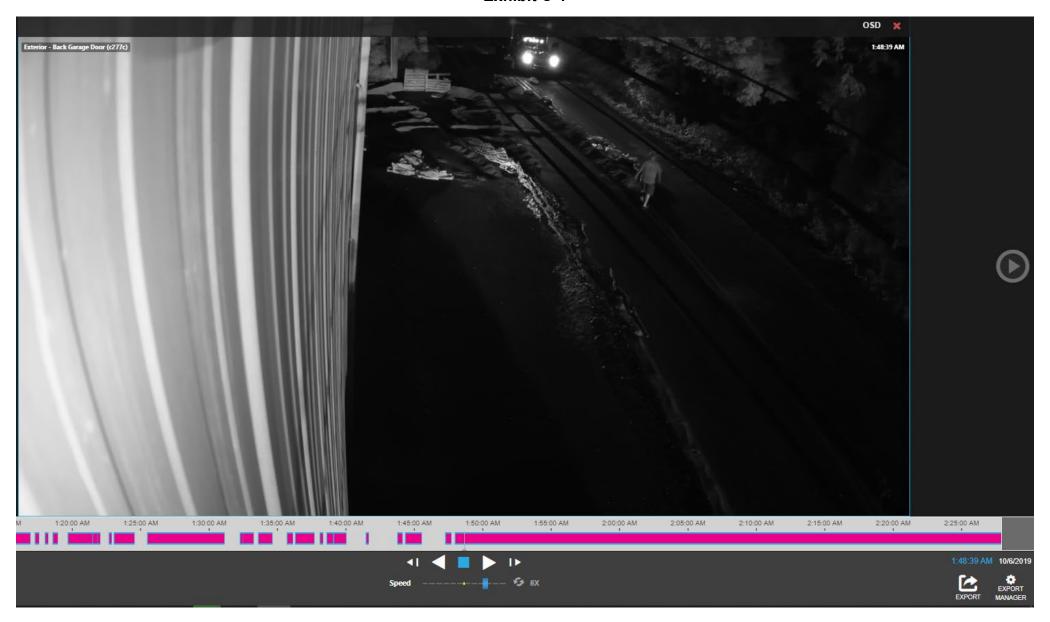


Exhibit C-2

